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D3

wherein less uptake of the fatty acid substrate in the first aliquot compared to the second aliquot is indicative that the agent is an inhibitor of FATP1.

Amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (pages i - iii).

REMARKS

Applicants have amended Claims 82, 130 and 136 and cancelled Claims 133, 135 and 139 as discussed in the telephonic interview with the Examiner on June 20, 2003.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned at (978) 341-0036.

Respectfully submitted,

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MARKED UP VERSION OF AMENDMENTS

Claim Amendments Under 37 C.F.R. § 1.121(c)(1)(ii)

82. (Amended) A method for identifying an agent which is an inhibitor of FATP1, comprising the steps of:
- (a) introducing into cells one or more vectors comprising a gene encoding a cell surface protein and a nucleic acid encoding FATP1 comprising the amino acid sequence of SEQ ID NO:25;
  - (b) contacting the host cells with an antibody to said [anti-]cell surface protein [antibody] and labeled fatty acid substrate of FATP1;
  - (c) contacting a first aliquot of the host cells with an agent being tested as an inhibitor of FATP1, while leaving a second aliquot of the host cells uncontacted with the agent;
  - (d) identifying, in said [the] first and second aliquots, [the] host cells expressing said [the] cell surface protein by detecting [the] said antibody to said [anti-]cell surface protein [antibody] bound to the host cells; and
  - (e) measuring, in the first and second aliquots, uptake of the fatty acid substrate of the host cells identified as expressing the cell surface protein;
- wherein less uptake of the fatty acid substrate in the first aliquot compared to the second aliquot is indicative that the agent is an inhibitor of FATP1.
130. (NEW) A method for identifying an agent which is an inhibitor of fatty acid uptake by a protein, said protein having FATP1 activity and encoded by a polynucleotide which hybridizes to a complement of the polynucleotide of SEQ ID NO: 24 under stringent conditions comprising incubation in 6X SSC at 65°C, followed by two or more washes in 0.2X SSC/0.5% SDS at 65°C, comprising the steps of:
- (a) introducing into cells one or more vectors comprising a gene encoding a cell surface protein not endogenously expressed in said cells and a nucleic acid encoding FATP1

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comprising the amino acid sequence of SEQ ID NO:25 to produce transformed host cells;

- (b) contacting said [the] host cells with an antibody to the [anti-]cell surface protein [antibody] and labeled fatty acid substrate of FATP1;
- (c) contacting a first aliquot of said [the] host cells with an agent being tested as an inhibitor of FATP1, while leaving a second aliquot of said [the] host cells uncontacted with the agent;
- (d) identifying, in the first and second aliquots, said [the] host cells expressing the cell surface protein by detecting the antibody to the [anti-]cell surface protein [antibody] bound to said [the] host cells; and
- (e) measuring, in the first and second aliquots, uptake of the fatty acid substrate of said [the] host cells identified as expressing the cell surface protein;

wherein less uptake of the fatty acid substrate in the first aliquot compared to the second aliquot is indicative that the agent is an inhibitor of FATP1.

136 (NEW) A method for identifying an agent which is an inhibitor of fatty acid uptake by a protein, said protein having FATP1 activity and encoded by a polynucleotide which hybridizes to a complement of the polynucleotide of SEQ ID NO: 46 under stringent conditions comprising incubation in 6X SSC at 65°C, followed by two or more washes in 0.2X SSC/0.5% SDS at 65°C, comprising the steps of:

- (a) introducing into cells one or more vectors comprising a gene encoding a cell surface protein not endogenously expressed in said cells and a nucleic acid encoding FATP1 comprising the amino acid sequence of SEQ ID NO:25 to produce transformed host cells;
- (b) contacting said [the] host cells with an antibody to the [anti-]cell surface protein [antibody] and labeled fatty acid substrate of FATP1;
- (c) contacting a first aliquot of said [the] host cells with an agent being tested as an inhibitor of FATP1, while leaving a second aliquot of said [the] host cells uncontacted with the agent;

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- (d) identifying, in the first and second aliquots, said [the] host cells expressing the cell surface protein by detecting the antibody to the [anti-]cell surface protein [antibody] bound to said [the] host cells; and
  - (e) measuring, in the first and second aliquots, uptake of the fatty acid substrate of said [the] host cells identified as expressing the cell surface protein;
- wherein less uptake of the fatty acid substrate in the first aliquot compared to the second aliquot is indicative that the agent is an inhibitor of FATP1.